AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application.

1. (Currently Amended) An exhaust system comprising:

an exhaust passage that allows exhaust gas discharged from an internal combustion engine to pass therethrough;

a primary exhaust emission control unit including a catalyst to purify the exhaust gas;

a first exhaust heat collecting unit including a thermoelectric element that converts thermal energy of the exhaust gas into electric energy, the exhaust passage being divided into a first passage provided with the primary exhaust emission control unit, and having a first inlet and a first outlet, defining a first flowpath, with an upstream end and a downstream end, and a cut-off valve downstream of the catalyst, and a second passage provided with the first exhaust heat collecting device including the thermoelectric element and having a second inlet and a second outlet, and an outlet door, the second outlet and the outlet door being downstream of the cut-off valve in said first passage; and

~~a control member that is operated to change a flow of the exhaust gas between the first passage and the second passage; wherein~~

~~an operation of the control member is controlled based on a temperature in the primary exhaust emission control unit;~~

~~the control member is operated such that the exhaust gas flows through the second passage when the temperature in the primary exhaust emission control unit exceeds a predetermined temperature; and~~

~~the predetermined temperature is determined based on an activation temperature of the catalyst in the primary exhaust emission control unit~~

a controller that controls said cut-off valve,

wherein said cut-off valve is responsive to a signal from said controller,

wherein in response to said signal from said controller, said cut-off valve either opens to allow exhaust gas to flow through said first passage, or closes to allow exhaust gas to flow through said second passage to said outlet door, said outlet door being closed when said cut-off valve is open, said outlet door being open when said cut-off valve is closed, and

wherein said signal to open or shut said cut-off valve is sent based on a temperature in the catalyst.

2. (Previously Amended) The exhaust system according to claim 1, further comprising a secondary exhaust emission control unit provided on the exhaust passage where the first passage and the second passage are joined.

3. (Previously Amended) The exhaust system according to claim 2, wherein an operation of the control member is controlled based on a temperature in the secondary exhaust emission control unit.

4. (Previously Amended) The exhaust system according to claim 3, wherein the control member is operated such that the exhaust gas flows through the second passage when the temperature in the secondary exhaust emission control unit exceeds a predetermined temperature.

5. (Previously Amended) The exhaust system according to claim 4, wherein the predetermined temperature is determined based on an activation temperature of the catalyst in the secondary exhaust emission control unit.

6. (Currently Amended) ~~The~~ An exhaust system ~~according to claim 2~~, ~~further~~ comprising:

an exhaust passage that allows exhaust gas discharged from an internal combustion engine to pass therethrough;

a primary exhaust emission control unit including a catalyst to purify the exhaust gas;

a first exhaust heat collecting unit including a thermoelectric element that converts thermal energy of the exhaust gas into electric energy, the exhaust passage being divided into a first passage provided with the primary exhaust emission control unit and a second passage provided with the first exhaust heat collecting device including the thermoelectric element;

a control member that is operated to change a flow of the exhaust gas between the first passage and the second passage;

a secondary exhaust emission control unit provided on the exhaust passage where the first passage and the second passage are joined; and

a second exhaust heat collecting unit including a thermoelectric element downstream of the secondary exhaust emission control unit;

wherein an operation of the control member is controlled based on a temperature in the primary exhaust emission control unit;

the control member is operated such that the exhaust gas flows through the second passage when the temperature in the primary exhaust emission control unit exceeds a predetermined temperature; and

the predetermined temperature is determined based on an activation temperature of the catalyst in the primary exhaust emission control unit.

7. (Previously Amended) The exhaust system according to claim 1, wherein:

the first passage and the second passage are combined into a single structure;

the first passage is provided in a center of the structure; and

the second passage is provided on an outer periphery of the first passage.

8. (Previously Amended) The exhaust system according to claim 1, wherein:

the second passage includes a heat exchange member that transfers heat of the exhaust gas to the exhaust heat collecting device; and

the exhaust heat collecting device is provided with a catalyst for purifying the exhaust gas.

9. (Previously Amended) The exhaust system according to claim 8, wherein the catalyst is carried on the heat exchange member.

10. (Previously Amended) The exhaust system according to claim 7, wherein the structure in which the first passage and the second passage are combined is placed in the vicinity of an exhaust manifold in the internal combustion engine.

11. (Previously Amended) The exhaust system according to claim 1, wherein the control member serves to change each flow rate of the exhaust gas flowing into the first passage and the second passage.

12. (Previously Amended) The exhaust system according to claim 11, wherein the control member comprises a valve that is operated to close and open one of the first passage and the second passage at a predetermined degree.

13. (New) An exhaust system comprising:

an exhaust passage through which flows exhaust gas from an engine;

a first catalytic converter, including a primary passage, said primary passage including a first inlet, a first outlet, a first catalyst between said first inlet and said first outlet, and a cut-off valve downstream of said catalyst, and a by-pass passage, including a second inlet, a second outlet, an exhaust heat power generator unit between the second inlet and the second outlet, and an outlet door with which the second outlet is provided, the second outlet and outlet door being downstream of said cut-off valve;

a controller including a temperature sensor for measuring temperature of said first catalyst and for providing signals to said cut-off valve in response to preselected temperature setpoints;

wherein at a first temperature setpoint, said cut-off valve opens, providing exhaust gas flow through said primary passage, said exhaust gas flow holding shut said outlet door of said by-pass passage; and

wherein at a second setpoint, said cut-off valve closes, preventing exhaust gas flow in said primary passage, allowing said outlet door of said by-pass passage to open, and providing exhaust gas flow through said by-pass passage.

14. (New) The exhaust system of claim 13, further comprising heat exchange fins provided in said by-pass passage.

15. (New) The exhaust system of claim 13, wherein said exhaust heat power generation unit includes a thermoelectric conversion module.

16. (New) The exhaust system of claim 13, further comprising a second catalytic converter in the exhaust passage downstream of the first catalytic converter

17. (New) The exhaust system of claim 13, wherein said primary passage and said by-pass passage are substantially parallel to one another.